

MULTIPOINT AND ONE POINT BACK PRESSURE TEST FOR GAS WELL

Type Test ☒ Initial ☐ Annual ☐ Special				Test Date 5-12-81	
Company Southland Royalty Company			Connection Southern Union Gathering		
Pool Basin			Formation Dakota		Unit
Completion Date 4-23-81		Total Depth 6435'		Plug Back TD 6393'	
Elevation 5623' GR		Farm or Lease Name McDaniel "B"			
Csg. Size 5.500	Wt. 15.5#	d 4.950	Set At 6435'	Perforations: From 6258' To 6379'	
Trg. Size 2.375	Wt. 4.7#	d 1.995	Set At 6379'	Perforations: From To	
Type Well - Single - Brodenhead - G.G. or G.O. Multiple Single - G.G.				Packer Set At -----	
Producing Thru Tubing		Reservoir Temp. °F θ		Mean Annual Temp. °F	
Baro. Press. - P _g 12.2		State New Mexico			
L	H	G _g .700	% CO ₂	% N ₂	% H ₂ S
Prover		Meter Run		Taps	

FLOW DATA						TUBING DATA		CASING DATA		Duration of Flow
NO.	Prover Line Size	X	Orifice Size	Press. p.s.i.g.	Diff. h _w	Temp. °F	Press. p.s.i.g.	Temp. °F	Press. p.s.i.g.	
SI							1237		1238	
1.	2"	X	3/4"				82		283	1 hr
2.							26		207	2 hrs
3.							22		211	3 hrs
4.										
5.										

RATE OF FLOW CALCULATIONS							
NO.	Coefficient (24 Hour)	$\sqrt{h_w P_m}$	Pressure P _m	Flow Temp. Factor Ft.	Gravity Factor F _g	Super Compress. Factor, F _{pv}	Rate of Flow Q, Mcfd
1	12.365		34.2	1.0000	.9258	1.0000	391
2.							
3.							
4.							
5.							

NO.	P _r	Temp. °R	T _r	Z	Gas Liquid Hydrocarbon Ratio _____ Mcf/bbl.
1.					A.P.I. Gravity of Liquid Hydrocarbons _____ Deg.
2.					Specific Gravity Separator Gas _____
3.					Specific Gravity Flowing Fluid _____
4.					Critical Pressure _____ P.S.I.A.
5.					Critical Temperature _____ °R

MAY 18 1981

OIL CON. COM.

DIST. 3

P _c 1250.2	P _c ² 1563000.0	(1) $\frac{P_c^2}{P_c^2 - P_w^2} = 1.0329$	(2) $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 1.0246$
NO.	P _i ²	P _w	P _w ²
1		223.2	49818.2
2			
3			
4			
5			

AOF = Q $\left[\frac{P_c^2}{P_c^2 - P_w^2} \right]^n = 401$

Absolute Open Flow	401	Mcf @ 15.025	Angle of Slope θ	Slope, n .75
Remarks:				

Approved By Division	Conducted By: Kelly Maxwell	Calculated By: James Smith	Checked By: L. O. Van Rye
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